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Application No.:   10/706,345

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Previously Presented)   A   method   for   processing   input/output request packets (IRPs) directed to a Data Volume for providing a single logical storage device to users and applications of a computing system, the Data Volume having a meta-data extent and at least one data extent, wherein the meta-data extent and at least one data extent are Basic Volumes, and the method is implemented above a Basic Volume Manager, the method comprising the steps of:

intercepting an initial IRP before the IRP reaches a file system associated with the IRP;

evaluating the IRP by a first volume filter associated with the meta-data extent to determine the meta-data extent to handle the IRP;

directing the IRP by the first volume filter to the appropriate meta-data extent;

redirecting the IRP from the meta-data extent to a second volume filter associated with the at least one data extent associated with the meta-data extent;

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returning a response to the initial IRP from the second volume filter associated with the at least one data extent;

wherein the meta-data extent is a first logical drive and the at least one data extent is a second logical drive;

the Data Volume appears as a single storage volume to the users and the applications; and

the meta-data extent comprises configuration information for use in setting up and maintaining the Data Volumes.

2.   (Original)   The method of claim 1 wherein the IRP is initiated by an originator of input/output (I/O).

3.   (Original)   The method of claim 2 wherein the originator of I/O is a Small Computer System Interface Target Mode Driver (SCSITMD).

4.   (Original)   The method of claim 1 wherein the meta-data extent is associated with a plurality of data extents.

5.   (Original)   The method of claim 4 wherein the plurality of data extents are located on a plurality of physical disks.

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6.   (Canceled)

7.   (Previously presented)   The method of claim 1 wherein the redirecting step includes creating additional IRPs by the volume filter, each additional IRP being derived from the initiated IRP and relating to a single data extent.

8.   (Canceled)

9.   (Previously presented)   A method for storing data across at least one physical disk and presenting the data as a single virtual disk comprising the steps of:

intercepting a first input/output request packet (IRP) from an originator of I/O before the IRP reaches a file system associated with the IRP ;

forwarding the first IRP to a first volume filter associated with the meta-data extent;

creating an additional IRP by the first volume filter for each data extent affected by the first IRP;

transmitting each additional IRP to a second volume filter associated with each data extent affected by the first IRP;

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allowing each additional IRP to pass through the second volume filter associated with volume filter of each data extent affected by the first IRP; and

returning a response to the first IRP from each second volume filter associated with the at least one data extent originator of I/O.

10. (Canceled)

11. (Previously Presented) The method of claim 9 wherein the data extents are located on separate physical disks.

12. (Previously Presented) The method of claim 9 wherein the data extents affected by the first IRP are located on separate physical disks.

13. (Canceled)

14. (Previously presented) A computer system for providing a single Data Volume of data storage to users and applications of the computing system, the system comprising:

a plurality of storage clients connected to at least one storage server across a computer network;

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a plurality of magnetic disks wherein Data Volumes may be created and virtually presented to said storage clients, each of said Data Volumes having a meta-data extent and at least one data extent, the meta-data extent including a first volume filter adapted to intercept and redirect input/output request packets (IRPs) received from one of the storage clients, before the IRP is received by an associated file system, to a second volume filter associated with the at least one data extent, said first volume filter configured to create an additional IRP for each data extent affected by the IRP; the second volume filter associated with each of the at least one data extent returns a response to the IRP, and wherein the first and second volume filters are implemented above a Basic Volume Manager; and

a central management facility for controlling the at least one storage server;

wherein the meta-data extent is a first logical drive and the at least one data extent is a second logical drive;

the Data Volume appears as a single storage volume to the users and the applications; and

the meta-data extent comprises configuration information for use in setting up and maintaining the Data Volume.

15.   (Original)   The computer system of claim 14 wherein the computer network is a fibre channel network.

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16. (Original) The computer system of claim 14 wherein each storage client is presented with a virtual disk including at least one Data Volume having a meta-data extent and at least one data extent.

17. (Canceled)

18. (Previously presented) The computer system of claim 14 wherein the at least one data extent is a plurality of data extents and the IRPs are redirected to the data extents based on which data extents are affected by the IRPs.

19. (Original) The computer system of claim 14 wherein each storage client is presented with a particular Data Volume including a meta-data extent and at least one data extent.

20. (Original) The computer system of claim 19 wherein the Data Volume is a simple volume.

21. (Original) The computer system of claim 19 wherein the Data Volume is a spanned volume.

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22. (Original) The computer system of claim 21 wherein the Data Volume includes at least three Basic Volumes and a volume filter is logically disposed above said Basic Volumes.

23. (Previously presented) A volume filter for redirecting input/output request packets (IRPs) sent from an input/output (I/O) originator, the volume filter comprising:

intercepting means for intercepting IRPs sent to a meta-data extent associated with a Basic Volume before the IRP is received by an associated file system;

evaluating means for evaluating IRPs to determine a meta-data extent to handle the IRP;

redirecting means for redirecting the IRPs to at least one data extent associated with at least one other Basic Volume wherein a plurality of data extents are associated with an equal number of Basic Volumes; and

creating means for creating an additional IRP for each data extent affected by a redirected IRP;

wherein the meta-data extent is a first logical drive and the at least one data extent is a second logical drive;

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the Data Volume appears as a single storage volume to the users and the applications; and

the meta-data extent comprises configuration information for use in setting up and maintaining the Data Volume.

24. (Original) The volume filter of claim 23 wherein the plurality of data extents includes data extents located on separate physical disks.

25. (Original) The volume filter of claim 24 wherein the volume filter is logically disposed above the Basic Volumes.

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